

Annual MSP Progress Report

Covanta Haverhill, Inc.
RR0128.008

Reporting Year 2004

In accordance with 310 CMR 7.08(2)(i) and the Material Separation Plan Guidance for Municipal Waste Combustors, please find attached the annual progress report for reporting year 2004 . This report documents the efforts and progress to date on educating the public to the hazards associated with mercury and programs designed to facilitate removal of mercury from the waste stream.

Format for Mercury MSP Annual Reports

In 2004, the Integrated Waste Services Association and its members, American Ref-Fuel, Covanta Energy and Wheelabrator Technologies, together with MA DEP, agreed on the following reporting format for Annual Reports of their respective Material Separation Plans submitted to the MA DEP. Beginning with the 2005 Reporting Year (January – December, 2005), facilities will submit Annual Reports containing information as described below. To the extent possible, facilities have used this format for the 2004 reporting year.

I. Summary of Plan Activities

This summary may mirror the MSP Plan description, and would include notations of changes or alterations to that Plan description for the activity that do not rise to the level of an amendment to the plan. The description includes the following information where applicable:

- a. Summary/Goal of program/activity/task;
- b. Problems/issues experienced while trying to implement program/task;
- c. Changes to program between proposal and implementation, if appropriate;
- d. Manner of contacting appropriate audience, advertising, or providing notice of the program;
- e. Duration of program;
- f. Proposed number of individuals or organizations to be contacted, if appropriate for that task (from Plan description);
- g. Actual or estimated number of individuals or organizations contacted, if appropriate;

II. Spreadsheet Summary of Mercury-Containing Products Collected for each Community

The listing will be sorted as follows:

- Listing by community or targeted audience, e.g., town, school, etc.;
- Type of product collected;
- Quantity of each product collected, and weight of mercury collected by product type.

III. Spreadsheet Summary of Mercury-Containing Products Collected for each Program/Activity

The listing will be sorted as follows:

- Listing by program/activity/task, i.e., school cleanouts, thermometer exchanges household hazardous waste collection days;
- Total amount of products and total weight of mercury collected.

IV. Spreadsheet Summary of MSP Budget and Expenses

The Report shall provide, at a minimum, a summary of the budget for programs and actual program costs sorted as follows:

- Administration Costs;
- Education Costs of IWSA, listed by program;
- Individual Program/Activity/Task Costs;
- Other Costs broken out as appropriate.

I. Summary of Plan Activities

NOTE: Progress on implementation of MSP III was greatly impeded by the tragic accidental death of Covanta's MSP Coordinator, Steve Parker, on August 26, 2004. Advertising and interviews for his replacement resulted in the appointing of Daniel Harty as new MSP Coordinator on December 13, 2004. In the interim, Covanta's Environmental Compliance Specialist, George Drew, fulfilled these duties.

During 2004, Covanta Haverhill, Inc. (Covanta) continued the implementation of the second Material Separation Plan for Mercury Containing Products (MSP II). On June 30, 2004, the MSP II was replaced by the MSP III. The MSP III, with minor variations, is a continuation of the goals and programs of the MSP II. As stated in the MSP III, various Hg collection and outreach activities continue to be conducted in the Covanta contract communities. In addition, other activities continue to be conducted with the hope of impacting and educating a broader population base. The following is an outline of the activities that were conducted between January 1, 2004 and December 31, 2004. Also included, where possible, is a quantification of the success of the activity. Where results of activities that were conducted are of a more subjective nature, we will attempt to indicate a level of success/participation.

1. Mercury Products Collection Routes

- a) The primary objective of this program was to create and coordinate a collection route system between a mercury recycler (Onyx Environmental or Complete Recycling Solutions) and the large generators of mercury content bulbs (fluorescent, HID, Metal-Halide etc.).
- b) Problems that were encountered in this program continue to be the inability to speak one-on-one with the appropriate contact at each business and adequately explain our program. Mass mailings done in conjunction with WasteCap were largely unproductive.
- c) Covanta will continue to work with large generators as they are found, but they will not be a specifically targeted area for our resources. This program will be incorporated into the outreach for Mercury Product Events in the 8 target city/towns listed below in section C.
- d) With experimenting with mailings and telemarketing, it was found that little response was realized. The focus for 2005 will be visiting businesses both large and small prior to Mercury Product Events. Small generators of bulbs (36 or less) will be invited to bring their bulbs/mercury products to the event. Those with greater than 36 bulbs will be assisted in contacting Onyx for their mail in program, OnyxPac. Covanta will offset costs with a 50% reimbursement to those companies.
- e) This approach will be used throughout 2005 for the 32 planned events in the 8 target communities.

f) Devoting a full day to visit businesses in each community before each event should result in outreach to most of the possible participants. This will also educate those businesses that have not collected bulbs in the past to set up a recycling program.

g) The count of visits made and responses will be tabulated.

2. Mercury Product Collection Events

a) During 2004, three of the Covanta communities (Chelmsford, Haverhill and Danvers) had extensive education/outreach conducted in their respective business communities. A total of nine (9) collection events were held within these communities. These events were designed to target and facilitate the collection of mercury and mercury bearing products from small businesses and residents of the Covanta contract municipalities. While larger businesses are allowed to participate, a separate program that was discussed earlier in this report was available and designed to more appropriately meet and satisfy their needs for the collection of mercury bearing wastes.

b) When interest lagged after the first 8 events, the advertisements were rewritten to encourage a larger audience. This was beneficial for the last event in Chelmsford. Also the advertisements were placed in local daily newspapers where weekly papers had been primarily used. This resulted in increased participation.

c) During 2005, the three Covanta communities will be increased to eight, adding Lawrence, Groton, Littleton, Middleton, and Wakefield with a total of thirty two (32) collections. These will be conducted in a similar manner, however, further experimenting will be done with more frequent advertising changes, additions of notices mailed out with electric bills (Littleton, Groton), mailings with businesses associations (Chelmsford), and the use of local cable.

d) See above

e) This program is the basic tool to encourage mercury product recycling and will continue to increase in the number of towns participating.

f) N/A

g) N/A

3. Thermometer Exchanges

a) Mercury thermometer exchanges were conducted during calendar year 2004 with an on-going program at a number of different locations, such as Boards of Health (Haverhill, Reading, and Melrose), Departments of Public Works (Haverhill, Lynnfield), HHW Collection Events, and Transfer Stations (Groton) with a variety of results and participation. These were conducted by municipal employees and were largely successful because of Covanta's supply of digital thermometers for a one-to-one swap. In addition, thermometer swaps were also conducted at the Covanta sponsored Mercury Collection Events described above.

b) The delay in the supply of flu vaccine at the end of 2004 caused the flu clinics to be cancelled. This resulted in no swap events in the autumn flu clinics as Covanta has done in the past. When the vaccine did become available in late 2004, the hastily scheduled flu clinics left no time to coordinate the exchanges.

c) Thermometer exchange events will be re-introduced in 2005. In addition to resuming thermometer swaps at flu clinics, events will be advertised and staged in most of the municipalities to be scheduled between the mercury product events in the 8 target communities.

d) Covanta will rely on cooperation from various town and private agencies to promote the thermometer exchanges. It has been recognized that each community differs in the organizations that are active. Chamber of Commerce, The Rotary, Business Associations, etc are just some of the resources that may be utilized.

e) In the past, the autumn season was targeted for this program. In 2005, Covanta will offer this program throughout the year.

f) N/A

g) N/A

4. Municipal Reimbursement for Mercury Program Expenses

a) In order to assist communities with the costs associated with mercury product recycling, Covanta continued to reimburse any Covanta contract community for the costs incurred in collection, storage and recycling of residentially and/or municipally generated mercury containing products (fluorescent lights, thermostats, thermometers etc.), collected at one-day HHP events or at permanent facilities (either permanent HHP centers or Universal Waste Sheds).

b) Although this program continues to be successful, frequent turnover of personnel in DPW operations causes some confusion. Regular education as to the benefits of the program is necessary. The offer of storage sheds and the explanation of reimbursement are reviewed periodically.

c) The request for reimbursement also allows Covanta to document mercury recycling efforts. Communication with the municipalities on a regular basis allows the goals of this program to be realized.

d) Communication by telephone or fax doesn't create the level of partnership necessary to have a viable program. Visits to transfer stations, town hall offices, and the quarterly recycling coordinator's meeting makes the members understand that mercury product recycling is a team effort.

e) This program will continue without change.

f) Beyond the 16 recycling coordinators, there are people with various functions within their community that take an interest and take a part in assisting the program. Volunteers are included in this list.

g) N/A

5. Thermostat Collection Program

a) Early on, it was recognized that a significant portion of mercury contained in the municipal waste stream was entering through the improper management/disposal of mercury containing thermostats. While programs do exist for the recycling and reclamation of these products, participation by HVAC technicians, trades people and consumers are limited, at best.

b) It was found that Thermostat Recycling Corporation's (TRC) had limited availability - it was only available at the wholesale level (not readily available to do-it-yourselfers) and the program was not advertised/marketed extensively in the communities where it is available. Poor recruitment efforts by the Thermostat Recycling Corporation, the initial cost of registering for the program and a lack of education/outreach to the HVAC trades people are among the reasons consistently mentioned for the low participation and limited collection numbers.

c) Therefore, Covanta has entered into an agreement with Complete Recycling Solutions (CRS) of Fall River, MA to supply pails in which generators of spent thermostats can collect them. When full, the generator will call Complete Recycling for pickup. As an inducement, Covanta has agreed to pay a \$5 bounty to the generator for each thermostat. Covanta's proposal included the purchase of an inventory sufficient to supply all the wholesale distributors of thermostats within the Covanta contract municipalities that wished to participate in the program.

d) In 2004, the target audience for this program was primarily hardware stores where residents would purchase replacement thermostats. CRS identified fifteen hardware stores in the 16 communities. A pail was placed in one store and a decal placed on the store's door. Three other stores declined to participate. The remaining stores are still to be contacted. In 2004, it was found that few people would bring in spent units. A mass mailing to contractors was made with the help of WasteCap in early 2004. Advertising in local papers as well as notices (decal) that read "We Recycle Thermostats" did little to improve the volume. Success was realized when tradesmen and electrical/plumbing supply stores agreed to join the program directly through Covanta.

e) This program is growing and will continue to be a major focus of the material separation program.

f) N/A

g) To date, 12 tradesmen have agreed to participate in the program and 7 of those have had thermostats picked up and received payment.

6. Marina Mercury Device Collections

- a) The goal of this activity was to target marinas and provide boat owners with outreach to properly manage any mercury containing devices they may generate such as bilge pump switches.
- b) The MSP coordinator worked with Complete Recycling Solutions, a Hg recycling vendor, on this activity. They generated a list of 9 marinas in the 16 communities. They attempted to contact and reach out to all marinas on the list. Three marinas agreed to participate in the program. Hg Collection pails were set up in each marina. Two others don't allow maintenance, thus no devices are generated. The remaining marinas are still trying to be contacted.
- c) N/A
- d) The MSP coordinator will continue to visit participating marinas and explore additional outreach possibilities. Also, he will visit remaining nonparticipating marinas to determine applicability.
- e) Target the remainder of the marinas on the list
- f) N/A
- g) N/A

7. School Mercury Cleanouts

- a) Covanta will contract for mercury school cleanouts and attempt to conduct cleanouts at 21 schools during the 2 ½ year MSPIII. The cleanout will include: initial contact, school staff meeting, securing participation agreement from administration, mercury inventory, mercury training for staff (if requested) ordering replacement products, arranging safe pickup of mercury materials, and follow up.
- b) This program was not activated in 2004 as Covanta was hiring a new MSP coordinator. Also, working with NEMOA was not possible as it was later determined that they are restricted from working with a private company. Also, the process of contracting a suitable engineering company slowed progress.
- c) N/A
- d) With the assistance of recycling coordinators within the community, the proper school official will be recognized. The program will be explained/offered to the school system.
- e) The target of 21 schools is the goal of MSPIII
- f) N/A

g) N/A

8. Regional Outreach/Education: IWSA Component

See Attachment 1.

9. Facility Level Outreach/Education Efforts

a) Along with the programs and activities described earlier in this report, Covanta conducted and/or participated in other outreach and educational activities designed to instruct the public on the problems associated with improper management of mercury containing products.

b) N/A

c) Because of problems with Outreach Consultants (Waste Cap, CRS), Covanta investigated other outreach options. Among the larger efforts was the purchase of advertising space on two school buses in Haverhill. Once approved by MA DEP, Covanta worked to implement this activity as soon as was possible. Not only did this advertising present the mercury recycling message in a mobile way, but the majority of the monies went to the city schools. With this program, these buses not only carry the children (and the message) throughout the city of Haverhill each morning and afternoon, but were then scheduled for supplemental activities during the day. For field trips and school sports events, these buses traveled throughout the state as well to neighboring states. In addition, these buses will be utilized during the summer season for other programs. Finally, the Covanta buses led the 2004 Haverhill Christmas Parade at which over 40,000 people attended. .

d) Sponsored educational booths at numerous environmental and business/Chambers of Commerce events including: The Massachusetts Municipal Association Annual Meeting and Trade Show in Boston MA; The Greater Merrimack Valley Chamber of Commerce Business to Business Expo, in North Andover, MA; The Haverhill Chamber of Commerce Business Expo in Haverhill, MA.

e) This outreach program will continue through 2005 as described in MSPIII.

f) N/A

g) N/A

10. Medical and Dental Outreach

a) Covanta, with the assistance of WasteCap of Massachusetts (WasteCap), began the process of working with the medical and dental facilities within our contract communities during 2001. Our goal was to educate them on the problems associated with improper management of end of life mercury containing products/material and to work with them on implementing strategies designed to remove and/or replace these products, where possible.

- b) Because of funding problems, WasteCap notified Covanta that it would no longer be able to assist Covanta with outreach services.
- c) This program will be included in the general outreach of the material separation plan.
- d) Overall advertising as to the dangers of mercury, education through various meetings, etc, will increase the awareness of medical/dental professionals.
- e) This effort will continue in 2005
- f) N/A
- g) N/A

Summary

Overall, the results of the last six months of MSPII and the first six months of MSPIII remained quite good. The amount of fluorescent bulbs recycled during 2004 and reported to Covanta was approximately 164,888 feet . Additionally, 10 pounds of elemental mercury and 455 pounds of Mercury Containing Articles (MCMA) were collected and recycled. This includes approximately 145 thermometers that were collected and recycled. It does not include materials collected/aggregated but not yet shipped – materials located at/in a Universal Waste Shed or Board of Health office where collection activities are still on going.

ATTACHMENT 1
IWSA OUTREACH ACTIVITIES

Integrated Waste Services Association (IWSA)
Materials Separation Plan Activities 2004
Annual Report on the Results of the Mercury Recovery Program

1. Introduction

Integrated Waste Services Association's activities in support of Massachusetts' Waste-to-Energy Facilities' Materials Separation Plan (MSP3) for 2004 are a continuation of the IWSA's 2003 Regional Education Program with a few modifications. This report describes the activities involved in the design, implementation and operation of IWSA's Program in support of the five waste-to-energy plants operating in Massachusetts and their Mercury Materials Separation Plan Program (MSP). Each facility's MSP is community focused, locally based and operated; and the IWSA activities are designed to support in a coordinated fashion the MSPs on a regional basis.

IWSA Regional Program activities for 2004 consisted of the following elements:

- Evaluation & Analysis of 2003 Education Campaign "Keep Mercury From Rising"
- Print & Radio Advertising for "Keep Mercury From Rising"
- Revision & Update of Website www.keepmercuryfromrising.org
- Revision of Print materials in special formats for targeted events
- Dissemination of print and video materials developed in 2002 and 2003 to facilities, the public and media

2. Regional Education Program "Keep Mercury From Rising"

The Integrated Waste Services Association coordinated the regional education / outreach program for five Massachusetts' waste-to-energy facilities including facilities located in Saugus, North Andover, Millbury, Haverhill, and SEMASS.

a) Objectives

In 2004, the Regional Outreach Plan supported individual facility programs by the continued promotion of the media campaign, "Keep Mercury from Rising". This campaign included newspaper and radio advertisements. The campaign used targeted advertising educating the readers and listeners about the concerns related to mercury. The advertisements also encouraged residents to contact their local health departments to receive more information about mercury and find out where in their communities they could dispose of mercury containing devices.

The objectives for 2004 were met and included the following:

- The Regional Outreach Program continued to raise awareness about mercury-containing products in the home and the proper handling and disposal of these products;
- The Program provided information and promote local recycling events;
- The Program continued to build an integrated communications program that leveraged opportunities for incremental, free media, and worked synergistically with the efforts of individual waste-to-energy facilities.

b) Tactics

A public survey was completed in early 2004 measuring the effectiveness of the educational campaign “Keep Mercury From Rising.” Findings from this survey were analyzed and used to evaluate and design the Regional Program. The Program continued targeted advertising to reach communities serviced by the facilities, as well as implementing marketing of print advertisements and radio live-read script to run as public service announcements. In addition to the print advertisements targeted at the general residential public, a print advertisement targeted at contractors and urging the collection and recycling of thermostats containing mercury switches was developed in 2003, and both continue to be used in targeted markets. The website, www.keepmercuryfromrising.org, was revised to make it more user-friendly, and now includes more contact information and contractor material, as well as continuing to provide information and assistance with recycling of mercury-containing products to the general public. IWSA produced five videos in 2003 for each waste-to-energy plant, and helped to promote those videos in 2004 by placing them on the website and developing a “B-roll” version of visuals and sound for use by the media covering MSP events. The videos show the unique and effective programs now in place to keep mercury containing products out of the waste stream.

i) Survey

The effectiveness of the regional education campaign is in large part measured by an annual research survey. The polling is designed to measure positive changes in public attitudes and behaviors, as well as the receptiveness of the message. The survey questionnaire was in the field May, 2004, and consisted of 500 completes, providing a 95% confidence level. The results showed that most people had not heard of the “Keep Mercury From Rising” slogan, and therefore media buys were increased slightly to determine if additional exposure might increase awareness. However, there was a dramatic increase in reported action taken by respondents if a mercury thermometer broke in the home. The survey also reported an increase in the amount of money a respondent would pay (\$15.00 or less) to substitute a mercury product with a non-mercury containing product.

ii) Advertising

Radio and print advertising was run May 3-30, 2004. IWSA continued to use the “Keep Mercury from Rising” print advertisements featuring both the thermostat (contractor audience) and the thermometer (general public audience). Radio is a targeted medium that provided cost-efficient mass communication and built frequency of message delivery. Print advertising was equally effective. In addition to advertising in the Boston Globe, individual facilities used the “Keep Mercury From Rising” advertisements to announce local activities.

A three-week radio buy was implemented in May 2004. The buy was timed to encourage mercury recycling activities and added-value opportunities (e.g., sponsorship of special broadcasts, contests, and free spots stations provide). Radio stations airing the advertisements included WBZ-AM, WODS-FM, and WMJX-FM.

In 2004, concentrated efforts were continued in the Boston Globe, particularly the North Zone and Northwest-A Zone editions. The Boston Globe was utilized for its reach with its circulation of 237,524; it allowed coverage of both weeks of the

campaign in both mediums, and it enabled utilization of a maximum page size (page dominant) versus community-type newspapers. Overall, the Boston Globe generated high impact with its larger page size and color availability (color not available in most community papers), while reaching a large audience within our target communities more than one time.

iii) Web-based Tool

The website, www.keepmercuryfromrising.org, was revised in the following manner to make it more user-friendly and provide additional information:

1. The site needed site-wide navigation. Navigation now is under the masthead. Incorporated all the information currently on the site in the following categories:
 - **Home** - text from <http://keepmercuryfromrising.org/> without the links and phone information, plus the first two paragraphs from: <http://keepmercuryfromrising.org/main.html>
 - **Drop-off sites** - links to <http://keepmercuryfromrising.org/communities/>
 - **Spills** - links to http://keepmercuryfromrising.org/mercury_spills.html
Put the text on that page in a bulleted list, rather than a paragraph so it is easier for people to read. The link to the Mercury Spill PDF
 - **FAQs** -contains questions now found on <http://keepmercuryfromrising.org/main.html>
Make this one page - standard FAQ format.
 - **Video** - video content now is on website from <http://keepmercuryfromrising.org/main.html>
 - **Contractors** - contains info on: <http://keepmercuryfromrising.org/contractor.html>
 - **Links** - content from <http://keepmercuryfromrising.org/links.html>
2. One site-wide masthead:
http://keepmercuryfromrising.org/mercury_spills.html
3. Created an error page.

iv) Print Materials

IWSA continued to make available education brochures and print information developed in 200-2003, and assisted facilities in design of materials needed for a school bus fundraiser. The basic “Keep Mercury From Rising” message is consistent with media formats.

v) Video

The five-minute “Keep Mercury from Rising” educational video was completed for each facility in 2003. The video explains the need to recycle mercury-containing products and the efforts undertaken by the state of Massachusetts and waste-to-energy facilities to reduce the amount of mercury entering the environment.

The video now is being used at the five waste-to-energy facilities for educational purposes during tours and other meetings. Copies of the video have been made available to local cable access television stations and a “B-roll” of visuals and sound is available for media covering MSP events. Copies of the video also have been given to local public officials to be shown at meetings, schools, senior citizen centers, and other organizations that would benefit from viewing the video. As noted above, the video also may be viewed at the website.

vi) Public Service Announcements

The MSP III, 2004-2006 plan, discussed IWSA’s intent to market a Public Service Announcement to gain free media. Individual facilities did use the existing radio spots to develop targeted PSAs, but the regional PSA effort will be begun in latter half of MSP 3, during the calendar year 2005.

c) 2004 Estimates & Expenditures

(See attached for individual facility contributions)

Activity	Estimated Cost	Actual Expenditure	Explanation
Survey	\$20,000	\$20,000	
Media Buys	\$143,000	\$175,000	Slightly increased media buys for greater exposure of message
Website	\$5,000	\$15,000	Revisions required more extensive work on the site to incorporate videos, user interface and information.
Print	\$5,000	\$1,000	Facilities paid for their printing, in most instances.
Video	\$2,000	\$2,000	
PSA	\$25,000	\$0	Individual facilities produced PSA on an “as needed” basis. PSA funds were used in media buys. PSA effort will be initiated in 2005

Project	Actual	SEMASS	Haverhill	Millbury	Saugus	N. Andover	Total
		22.73%	21.27%	19%	18%	19%	100%
Survey	20,000	4,546	4,254	3,800	3,600	3,800	20,000
Media Buys	175,000	39,778	37,223	33,250	31,500	33,250	175,000
Website	15,000	3,410	3,191	2,850	2,700	2,850	15,000
Print	1,000	227	213	190	180	190	1,000
Video	2,000	455	425	380	360	380	2,000
PSA	0	0	0	0	0	0	0
	213,000	48,415	45,305	40,470	38,340	40,470	213,000

Note: 7,000 will be carried over to Jan-June, 2005
MSP 3